

## URS OPERATING SERVICES

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October 28, 2011

Margaret Williams  
Site Assessment Manager  
U.S. Environmental Protection Agency, Region 8  
Mail Code: 8EPR-SA  
1595 Wynkoop Street  
Denver, Colorado 80202-1129

**SUBJECT:** START 3, EPA Region 8, Contract No. EP-W-05-050, TDD No. 1108-07  
Trip Report, 5600 South 900 East Plume, Murray, Salt Lake County, Utah.


Dear Ms. Williams:

Attached is one copy of the draft trip report of the field work conducted at the 5600 South 900 East Plume site in Murray, Utah. Field activities were conducted September 26-28, 2011. This document is submitted for your review and comments.

If you have any questions, please call me at 303-291-8241.

Sincerely,

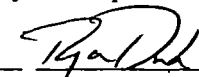
URS OPERATING SERVICES, INC.

  
Henry Schmelzer  
Project Manager

cc: Charles W. Baker/UOS (w/o attachment)  
File/UOS

### EPA ACTION BLOCK

- ☒ Approved
- ☐ Approved, TDD to follow
- ☐ Approved as corrected
- ☐ Disapproved
- ☐ Review with \_\_\_\_\_
- ☐ Original to \_\_\_\_\_
- ☐ Copy to \_\_\_\_\_
- ☐ Reply envelope enclosed

12/5/11  For Margaret Williams  
Date By

## TRIP REPORT

### 5600 S. 900 EAST PLUME Murray, Salt Lake County, Utah

#### 1.0 INTRODUCTION

URS Operating Services, Inc. (UOS) was tasked by the Environmental Protection Agency (EPA), under Superfund Technical Assessment and Response Team 3 (START) contract # EP-W-05-050, Technical Direction Document (TDD) No. 1108-07, to provide technical support to the Utah Department of Environmental Quality (UDEQ) as part of a site assessment associated with a perchloroethylene (PCE) plume in the groundwater. Specifically, START was tasked to drill nine direct push boreholes that would be utilized by UDEQ to collect subsurface soil samples, and to install temporary groundwater monitoring wells. The sample locations were within a few city blocks of the intersection of 5600 South and 900 East in Murray, Salt Lake County, Utah (Attachment A). Site activities related to this response were conducted September 26-28, 2011. No samples were collected by START for this project. Field activities followed the applicable UOS Technical Standard Operating Procedures (TSOPs) and the generic Quality Assurance Project Plan.

#### 2.0 BACKGROUND

The purpose of this field work was to assist the UDEQ with their site assessment by drilling boreholes using a direct push drill rig so that UDEQ could collect groundwater and soil samples for a subsurface investigation of potential PCE contamination. A previous site assessment in the area in 2008 indicated the presence of PCE in the groundwater possibly associated with a dry cleaning establishment.

#### 3.0 SITE ACTIVITIES

On September 25, 2011 START members Henry Schmelzer and Maitland Walker mobilized EPA's Power Probe direct push rig to Murray, Utah. On September 26, 2011 START met with UDEQ project manager Kim Viehweg at the background sample site number 10 near the stream at 900 East and Vine Street. The subsurface soils from the borehole produced dark brown clay on top of river rock and sand to a depth of 11 feet. A temporary well was installed and UDEQ collected soil and groundwater samples.

The START team moved to sample location 9 in the parking lot behind Copenhagen West. The borehole produced dark brown plastic clay yielding to light grey sand to a depth of 16 feet. A temporary well was installed and UDEQ collected soil and groundwater samples.

The next sample location was number 8 near the National Guard office within the Oakwood Village Shopping Center. The borehole yielded very low soil recovery due to large stones and gravel plugging the coring tip. The borehole produced water and coarse sand at 10 feet. A temporary well was installed and UDEQ collected soil and groundwater samples.

Sample location number 7 near Harris Hearing Aids was the next borehole location. The borehole produced dark gray sandy clay and lighter grey clayey sand to a depth of 8 feet. A temporary well was installed and UDEQ collected soil and groundwater samples.

While setting up at sample location 6, START experienced problems with the Power Probe and was unable to repair it onsite. It was decided to take the Power Probe to the manufacturer's facility located approximately 3 hours away in American Falls, Idaho for diagnostics and repair.

On September 27, 2011 START drove the Power Probe to the manufacturing and repair facility. The equipment was repaired in approximately 2 hours. START returned to Murray, Utah that afternoon ready to continue sampling. Kim Viehweg indicated sampling would continue on the following day.

On September 28, 2011 START resumed work at sample location 3 in front of Chase Bank. The borehole produced dark grey clay and sand to a depth of 12 feet. A temporary well was installed and UDEQ collected soil and groundwater samples. A slight petroleum-like odor was noted emanating from the groundwater collecting in the purge bucket, but no sheen was noted.

The next sample location was number 2 in the parking lot behind Pizza Hut. The borehole produced sand that trended to moist grey sand to a depth of 12 feet. A temporary well was installed and UDEQ collected soil and groundwater samples.

START returned to sample location 6 in the parking lot of Sports Authority. The borehole produced moist plastic sandy clay and a dark grey mix of sand and river pebbles to a depth of 12 feet. A temporary well was installed and UDEQ collected soil and groundwater samples.

The next sample location was number 4 in the parking area of Quick Lube. To reduce damage to pavement, an existing hole in the asphalt was selected and yielded medium brown sand and wet grey sand to a depth of 12 feet. A temporary well was installed and UDEQ collected soil and groundwater samples.

The final sample location was number 5 in the parking lot of the Sports Mall Athletic Club. The borehole produced grey sand and saturated tan sand to a depth of 12 feet. A temporary well was installed and UDEQ collected soil and groundwater samples.

At each location a peristaltic pump was set up to allow UDEQ to collect groundwater samples from each well. After samples were collected, the PVC well construction materials were removed and the boreholes were backfilled with native soils and bentonite. All locations where asphalt was penetrated as part of the borehole were patched using at least 4 inches of cold asphalt patch that was compressed using a 2-pound sledge hammer.

Upon completion of this project START mobilized to another project location in Taylorsville, Utah.

Site photos are provided in Attachment B.

#### **4.0     SAMPLING AND ANALYSIS**

No samples were collected for this project by START. A peristaltic pump was set up for UDEQ and their personnel collected the samples.

## **ATTACHMENT A**

### **UDEQ Proposed Site Location Map**

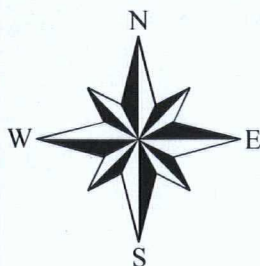




0 0.04 0.08 0.16 0.24 Miles

## Legend

- 5600 South 900 East Plume site
- Proposed borehole sites



Utah Department of  
Environmental Quality  
Division of Environmental  
Response and Remediation

Figure 4  
Site Map

5600 South 900 East Plume  
Salt Lake County, Utah

by: Kim Viehweg date: 3/03/09



## **ATTACHMENT B**

### **Photolog**



**Photo 1**

START member Henry Schmelzer prepares to add another length of rod to the borehole drilling at sample site number 7 (0926111451.jpg: 09/26/11).



**Photo 2**

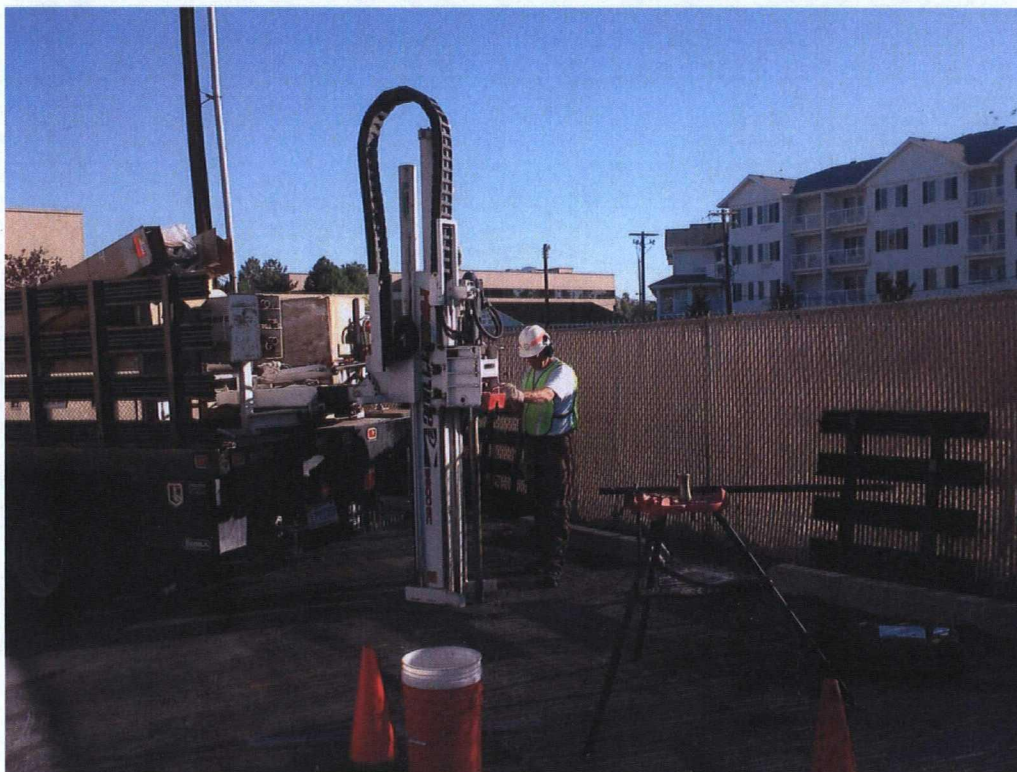
START member Schmelzer tests the soil core for moisture content at sample site number 7 (0926111454.jpg: 09/26/11).





**Photo 3**

START member Schmelzer taking notation of the sample core lithology at sample site number 2 (0928110747.jpg: 09/28/11).



**Photo 4**

START member Schmelzer operating the Power Probe at sample site number 2 (0928110914.jpg: 09/28/11).





**Photo 5**

START member Schmelzer checks the deflection of the drill casing during the operation of the PowerProbe at sample site number 6 (0928111233b.jpg: 09/28/11).